IN THE CLAIMS:

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-9. (Cancelled)

10. (Currently Amended): A method of treating arthritis ~~an autoimmune disorder~~ in a subject comprising administering to the subject an antibody or antigen-binding fragment thereof that binds to interleukin-22 (IL-22) in an amount sufficient to treat the arthritis ~~autoimmune disorder~~ in the subject.

11. (Cancelled)

12. (Currently Amended): The method of claim 10, wherein said arthritis ~~autoimmune disorder~~ is selected from the group consisting of rheumatoid arthritis, osteoarthritis, ~~multiple sclerosis, myasthenia gravis, Crohn's disease, inflammatory bowel disease,~~ lupus-associated arthritis and psoriatic arthritis. ~~, diabetes and psoriasis.~~

13. (Currently Amended): The method of claim 10, wherein said arthritis ~~autoimmune disorder~~ is rheumatoid arthritis.

14. (Currently Amended): The method of any of claim 10, 12, or 13, wherein said antibody is a neutralizing anti-IL-22 antibody or an antigen-binding fragment thereof.

15. (Cancelled)

16. (Original): The method of claim 14, wherein said subject is a human.

17. (Previously Presented): A method of ameliorating symptoms associated with arthritis, comprising administering to a subject an antibody or antigen-binding fragment thereof that binds to IL-22 in an amount sufficient to ameliorate the symptoms in the subject.

18. (Currently Amended): The method of claim 17, wherein said arthritis is selected from the group consisting of rheumatoid arthritis, osteoarthritis, lupus-associated arthritis and psoriatic arthritis.

19. (Currently Amended): The method of claim 17, wherein said IL-22 antibody, or antigen-binding fragment thereof, is administered therapeutically.

20. (Currently Amended): The method of claim 17, wherein said IL-22 antibody, or antigen-binding fragment thereof, is administered prophylactically.

21-33 (Cancelled)

34. (Previously Presented): The method of claim 12, wherein said IL-22 comprises an amino acid sequence that is at least 90% identical to amino acids 34-179 of SEQ ID NO:2, wherein said IL-22 is capable of inducing the phosphorylation of a Stat-3 protein.

35. (Previously Presented): The method of claim 12, wherein said IL-22 comprises an amino acid sequence that is at least 95% identical to amino acids 34-179 of SEQ ID NO:2, wherein said IL-22 is capable of inducing the phosphorylation of a Stat-3 protein.

36. (Previously Presented): The method of claim 12, wherein said IL-22 comprises the amino acid sequence of amino acids 34-179 of SEQ ID NO:2.

37. (Previously Presented): The method of claim 12, wherein said IL-22 comprises the amino acid sequence of SEQ ID NO:2.

38. (Previously Presented): The method of claim 12, wherein said antibody, or antigen-binding fragment thereof, binds to a fragment of IL-22 comprising an amino acid sequence selected from the group consisting of amino acids 50-60, 63-81, 84-93, and 168-177 of SEQ ID NO:2.

39. (Currently Amended): The method of any of claim 17, 18, 19, or 20, wherein said antibody, or antigen-binding fragment thereof, is a neutralizing antibody.

40. (Previously Presented): The method of claim 12, wherein said antibody, or antigen-binding fragment thereof, is selected from the group consisting of a monoclonal antibody, a polyclonal antibody, a chimeric antibody, a single-chain antibody, a CDR-grafted antibody and a humanized antibody.

41. (Previously Presented): The method of claim 40, wherein said antibody, or antigen-binding fragment thereof, is a monoclonal antibody.

42. (Previously Presented): The method of claim 12, wherein said antibody, or antigen-binding fragment thereof, is a human antibody.

43. (Currently Amended): A method of treating rheumatoid arthritis in a subject, comprising administering to the subject an antibody or antigen-binding fragment thereof that binds to IL-22 in an amount sufficient to treat the rheumatoid arthritis ~~autoimmune disorder~~ in the subject, wherein said IL-22 comprises an amino acid sequence that is at least 90% identical to amino acids 34-179 of SEQ ID NO:2 and is capable of inducing the phosphorylation of a Stat-3 protein.

44. (Previously Presented): The method of claim 43, wherein said IL-22 comprises an amino acid sequence that is at least 95% identical to amino acids 34-179 of SEQ ID NO:2 and is capable of inducing the phosphorylation of a Stat-3 protein.

45. (Previously Presented): The method of claim 43, wherein said IL-22 comprises the amino acid sequence of amino acids 34-179 of SEQ ID NO:2.

46. (Previously Presented): The method of claim 17, wherein said IL-22 comprises an amino acid sequence that is at least 90% identical to amino acids 34-179 of SEQ ID NO:2, wherein said IL-22 is capable of inducing the phosphorylation of a Stat-3 protein.

47. (Previously Presented): The method of claim 17, wherein said IL-22 comprises an amino acid sequence that is at least 95% identical to amino acids 34-179 of SEQ ID NO:2, wherein said IL-22 is capable of inducing the phosphorylation of a Stat-3 protein.

48. (Previously Presented): The method of claim 17, wherein said IL-22 comprises the amino acid sequence of amino acids 34-179 of SEQ ID NO:2.

49. (Previously Presented): The method of claim 17, wherein said IL-22 comprises the amino acid sequence of SEQ ID NO:2.

50. (Previously Presented): The method of claim 17, wherein said antibody, or antigen-binding fragment thereof, binds to a fragment of IL-22 comprising an amino acid

sequence selected from the group consisting of amino acids 50-60, 63-81, 84-93, and 168-177 of SEQ ID NO:2.

51. (Previously Presented): The method of claim 17, wherein said antibody, or antigen-binding fragment thereof, is selected from the group consisting of a monoclonal antibody, a polyclonal antibody, a chimeric antibody, a single-chain antibody, a CDR-grafted antibody and a humanized antibody.

52. (Previously Presented): The method of claim 51, wherein said antibody, or antigen-binding fragment thereof, is a monoclonal antibody.

53. (Previously Presented): The method of claim 17, wherein said antibody, or antigen-binding fragment thereof, is a human antibody.

54. (Previously Presented): The method of claim 17, wherein said arthritis is psoriatic arthritis.

55. (Previously Presented): The method of claim 43, wherein said antibody, or antigen-binding fragment thereof, binds to a fragment of IL-22 comprising an amino acid sequence selected from the group consisting of amino acids 50-60, 63-81, 84-93, and 168-177 of SEQ ID NO:2.

56. (Previously Presented): The method of claim 43, wherein said antibody, or antigen-binding fragment thereof, is selected from the group consisting of a monoclonal antibody, a polyclonal antibody, a chimeric antibody, a single-chain antibody, a CDR-grafted antibody and a humanized antibody.

57. (Previously Presented): The method of claim 56, wherein said antibody, or antigen-binding fragment thereof, is a monoclonal antibody.

58. (Previously Presented): The method of claim 43, wherein said antibody, or antigen-binding fragment thereof, is a human antibody.

59. (Previously Presented): The method of claim 43, wherein said antibody, or antigen-binding fragment thereof, is a neutralizing antibody.

60. (Previously Presented): The method of claim 14, wherein said antibody, or antigen-binding fragment thereof, neutralizes IL-22 binding with an ED_{50} of about 5nM detected by an enzyme-linked immunoabsorbant assay (ELISA).

61. (Previously Presented): The method of claim 39, wherein said antibody, or antigen-binding fragment thereof, neutralizes IL-22 binding with an ED_{50} of about 5nM detected by an enzyme-linked immunoabsorbant assay (ELISA).

62. (Previously Presented): The method of claim 59, wherein said antibody, or antigen-binding fragment thereof, neutralizes IL-22 binding with an ED_{50} of about 5nM detected by an enzyme-linked immunoabsorbant assay (ELISA).

Please add new claims 63-76:

63. (New): The method of claim 10, wherein said arthritis is psoriatic arthritis.

64. (New): The method of claim 10, wherein said arthritis is osteoarthritis.

65. (New): The method of claim 10, wherein said arthritis is associated with lupus.

66. (New): The method of claim 10, wherein said antibody or antigen-binding fragment thereof is administered subcutanously or intravenously.

67. (New): The method of claim 17, wherein said arthritis is rheumatoid arthritis.

68. (New): The method of claim 17, wherein said arthritis is osteoarthritis.

69. (New): The method of claim 17, wherein said arthritis is associated with lupus.

70. (New): The method of claim 17, wherein said antibody or antigen-binding fragment thereof is administered subcutanously or intravenously.

71. (New): The method of claim 39, wherein said subject is a human.

72. (New): The method of claim 43, wherein said antibody or antigen-binding fragment thereof is administered subcutanously or intravenously.

73. (New): The method of claim 59, wherein said subject is a human.

74. (New): The method of claim 36, wherein the subject is a human.

75. (New): The method of claim 45, wherein the subject is a human.

76. (New): The method of claim 48, wherein the subject is a human.